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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,961	02/17/2004	Jeffrey Liu	DCARD-0401	9107

7590 10/05/2006
Bo-In Lin
13445 Mandoli Drive
Los Altos Hills, CA 94022

EXAMINER

WALSH, DANIEL I

ART UNIT	PAPER NUMBER
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2876

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/779,961	Applicant(s) LIU ET AL.	
	Examiner Daniel I. Walsh	Art Unit 2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-78 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5, 7-11, 13-60 and 62-78 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 6, 11, 61 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This application is in condition for allowance except for the following formal matters:

Claim Objections

2. Claims 1, 6, 8, 25, 30, 31-50, 51, 53, 54, 61, 73, 78 are objected to because of the following informalities:

Re claim 1: Replace "said optical data track further having a plurality of arc segments formed as cutoff circumferential segments from multiple substantially circular curves wherein said cutoff pieces having a width shorter than diameters of said substantially circular curves" with – said optical data track further having a plurality of arc segments comprising cutoff circumferential segments of multiple substantially circular curves wherein said cutoff piece has a width shorter than diameters of said substantially circular curves and the substantially circular curves, wherein the multiple substantially circular curves correspond to curves of a spiral that has a continuously outwardly varying radius and a non-fixed center as the spiral expands outwards, such that the arc segments correspond to different centers and different radii of the spiral.

Cancel claim 6

Re claim 8: add to the end of the claim -- wherein the multiple substantially circular curves correspond to curves of a spiral that has a continuously outwardly varying radius and a non-fixed center as the spiral expands outwards, such that the arc segments correspond to different centers and different radii of the spiral –

Cancel claim 12

Re claim 25: add to the end of the claim -- wherein the multiple substantially circular curves correspond to curves of a spiral that has a continuously outwardly varying radius and a non-fixed center as the spiral expands outwards, such that the arc segments correspond to different centers and different radii of the spiral --

Re claim 30, line 1: Replace "An optical memory strip" with -- A data storage card comprising an optical memory strip --.

Re claim 30, line 3: Replace "at least an optical data track" with -- the data storage card comprising at least an optical data track --.

Re claim 30: add to the end of the claim -- wherein the multiple substantially circular curves correspond to curves of a spiral that has a continuously outwardly varying radius and a non-fixed center as the spiral expands outwards, such that the arc segments correspond to different centers and different radii of the spiral, and wherein the OMS is disposed on the data storage card --

Re claims 31-50, 52 line 1: Replace "The OMS" with -- the data storage card --.

Re claim 51, line 1: Replace "An optical memory strip" with -- a data storage card comprising an optical memory strip --.

Re claim 51, line 3: Replace "at least an optical" with -- the data storage card comprising at least an optical --

Re claim 51: add to the end of the claim -- wherein the multiple substantially circular curves correspond to curves of a spiral that has a continuously outwardly varying radius and a non-fixed center as the spiral expands outwards, such that the arc segments correspond to different centers and different radii of the spiral, and wherein the OMS is disposed on the data storage card --

Re claim 53, line 1: Replace “An optical memory strip” with – A data storage card comprising an optical memory strip --.

Re claim 53, line 3: Replace “at least an optical” with – the data storage card comprising at least an optical –

Re claim 51: add to the end of the claim -- wherein the multiple substantially circular curves correspond to curves of a spiral that has a continuously outwardly varying radius and a non-fixed center as the spiral expands outwards, such that the arc segments correspond to different centers and different radii of the spiral, and wherein the OMS is disposed on the data storage card –

Re claim 54, line 2: Replace “useful for implementing as a cutoff piece” with – as a cutoff piece attached to a data storage card –

Re claim 54: add to the end of the claim -- wherein the multiple substantially circular curves correspond to curves of a spiral that has a continuously outwardly varying radius and a non-fixed center as the spiral expands outwards, such that the arc segments correspond to different centers and different radii of the spiral, and wherein the OMS is disposed on the data storage card –

Cancel claim 61

Re claim 73, line 2: “useful for implementing as a cutoff piece” with – as a cutoff piece attached to a data storage card –

Re claim 73: add to the end of the claim -- wherein the multiple substantially circular curves correspond to curves of a spiral that has a continuously outwardly varying radius and a non-fixed center as the spiral expands outwards, such that the arc segments correspond to different centers and different radii of the spiral, and wherein the OMS is disposed on the data storage card –

Re claim 78, line 2: Replace “useful for implementing as a cutoff piece” with – as a cutoff piece attached to a data storage card –

Re claim 78: Replace “said step of forming...constant radius” with -- wherein the multiple substantially circular curves correspond to curves of a spiral that has a continuously outwardly varying radius and a non-fixed center as the spiral expands outwards, such that the arc segments correspond to different centers and different radii of the spiral, and wherein the OMS is disposed on the data storage card –

Appropriate correction is required.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Additional Remarks

3. The Examiner notes that such amendments were proposed to the Applicant via fax on 9-27-06 but the Examiner had not heard back from the Applicant for authorization to make such changes by the time of this Action.

Allowable Subject Matter

3. Claims 1-5, 7-11, 13-60, 62-78 are allowed.

4. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to teach the claimed structural limitations of the optical data storage card as claimed, specifically the limitations regarding the OMS and data storage track orientation/shape, and the method of forming such.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: (see attached PTO-892).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel I. Walsh whose telephone number is (571) 272-2409. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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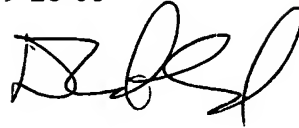
D. Walsh

Daniel I Walsh

Examiner

Art Unit 2876

9-28-06

A handwritten signature in black ink, appearing to read 'D. Walsh', with a stylized, cursive flourish at the end.

DANIEL WALSH
PRIMARY EXAMINER